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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method comprising:

positioning a distal portion of a delivery device at a location in a blood vessel;

imaging a thickness of at least a portion of a wall of the blood vessel at the location with an imaging assembly disposed in a lumen of the delivery device;

identifying a treatment site based on the imaging;

advancing a first portion of the distal portion of the delivery device a distance into the wall ~~a wall~~ of the blood vessel to the treatment site beyond an external elastic lamina of the blood vessel; and
after advancing the first portion of the delivery device, introducing a treatment agent in a sustained release composition through the first portion of the delivery device.

2. (Canceled)

3. (Previously Presented) The method of claim 1, wherein imaging comprises ultrasonic imaging the portion of the blood vessel wall.

4. (Currently Amended) The method of claim 1, wherein imaging comprises optical imaging the portion of the blood vessel wall.

5. (Original) The method of claim 1, wherein the treatment site comprises a peri-adventitial space.

6. (Original) The method of claim 1, wherein the treatment site comprises a site radially outward from a peri-adventitial space.
7. (Currently Amended) The method of claim 1, wherein the delivery device comprises a catheter and positioning the distal portion of the delivery device comprises positioning a delivery port for a needle of the catheter at a position upstream from an obstruction.
8. (Previously Presented) The method of claim 1, wherein the blood vessel is part of a network and another blood vessel in the network other than the blood vessel wherein the delivery device is positioned comprises an obstruction.
9. (Currently Amended) The method of claim 1, wherein the sustained release composition comprises a carrier ~~further comprising a sustained release carrier including the treatment agent.~~
10. (Currently Amended) The method of claim 9, wherein the carrier comprises particles having an average diameter of ~~on the order of~~ 10 microns or less.
11. (Currently Amended) The method of claim 9 ~~claim 10~~, wherein the carrier includes an opsonin-inhibitor.
12. (Original) The method of claim 1, wherein the treatment agent comprises an agent that induces an inflammation-inducing response.
13. (Original) The method of claim 12, wherein the treatment agent comprises a thermally conductive material, and the method further comprises, following introducing the treatment agent, heating the treatment agent.
14. (Previously Presented) The method of claim 1, wherein the treatment agent comprises an agent directed to a specific binding site, and wherein the treatment agent is operable to stimulate angiogenesis.

15-31. (Cancelled)

32. (Previously Presented) The method of claim 1, wherein imaging the thickness comprises imaging the thickness with optical coherence tomography.

33-37. (Cancelled)

38. (Currently Amended) A method comprising:

positioning a distal portion of a delivery device at a location in a blood vessel;

imaging a thickness of at least a portion of a wall of the blood vessel at the location with an imaging assembly disposed in a lumen of the delivery device;

advancing a first portion of the distal portion of the delivery device a distance into ~~a wall~~ the wall of the blood vessel to a treatment site beyond an external elastic lamina of the blood vessel; and

after advancing the first portion of the delivery device, introducing a treatment agent through the first portion of the delivery device,

wherein the treatment agent comprises an inflammation-inducing agent.

39. (Currently Amended) The method of claim 38, wherein the treatment agent further comprises an agent directed to specific binding sites that is operable to stimulate angiogenesis.

40. (Currently Amended) The method of claim 38, wherein the treatment agent comprises carrier particles including the inflammation-inducing agent and ~~have~~ having a sustained-release property within a physiological setting.

41. (Previously Presented) The method of claim 38, wherein the inflammation-inducing agent comprises at least one of a sol-gel particle, a silica particle, a glass including iron, chitin, fibrin, bacterial polysaccharides, vaccines, and particles of metal.

42. (Previously Presented) The method of claim 38, wherein the inflammation-inducing agent comprises at least one of a polycaprolactone, a polyhydroxybutyrate-valerate, a poly(oxy)ethylene, a polyurethane, and a silicone.

43. (Currently Amended) The method of claim 38, wherein the treatment agent comprises carrier particles including the inflammation-inducing agent, and wherein the carrier particles comprise at least one selected from poly (L-lactide), poly (D,L-lactide), poly (glycolide), poly (lactide-co-glycolide), polycaprolactone, polyanhydride, polydiaxanone, polyorthoester, polyamino acids, poly (trimethylene carbonate), and combinations thereof.

44. (New) The method of claim 1, wherein the imaging comprises imaging through a balloon disposed at the distal portion of the deliver device.

45. (New) The method of claim 44, wherein the imaging through the balloon comprises imaging through a transparent material of the balloon.

46. (New) The method of claim 1, wherein the treatment agent comprises a non-specific treatment agent operable to induce inflammation.

47. (New) The method of claim 1, wherein the treatment agent comprises at least one selected from sol gel particles, calcium phosphate glass comprising iron, fibrin, gelatin, low molecular weight hyaluronic acid, chitin, bacterial polysaccharides, and metal particles.

48. (New) The method of claim 1, wherein the first portion comprises a needled, and further comprising deflecting the needle with a ribbon member deflector.

49. (New) The method of claim 38, wherein the imaging comprises imaging through a balloon disposed at the distal portion of the deliver device.

50. (New) The method of claim 49, wherein the imaging through the balloon comprises imaging through a transparent material of the balloon.

51. (New) The method of claim 38, wherein the treatment agent comprises a non-specific treatment agent.
52. (New) The method of claim 38, wherein the treatment agent comprises at least one selected from sol gel particles, calcium phosphate glass having iron, fibrin, gelatin, low molecular weight hyaluronic acid, chitin, bacterial polysaccharides, and metal particles.
53. (New) The method of claim 38, wherein the first portion comprises a needled, and further comprising deflecting the needle with a ribbon member deflector.
54. (New) The method of claim 38, wherein the imaging comprises imaging with optical coherence tomography.